

04-16-04



EXPRESS MAIL LABEL NO.: ER 814896125 US

Appl. No. : 10/631,373
Applicant : Peter SOLIZ *et al.*
Filed : July 31, 2003
Title : A DIGITAL STEREO IMAGE ANALYZER FOR AUTOMATED
ANALYSIS OF HUMAN RETINOPATHY
Art Unit :
Examiner :
Docket No. : 2809-006

Commissioner For Patents
P.O. Box 1450
Alexandria VA 22313-1450

Dear Sir:

Enclosed please find the following:

1. Information Disclosure Statement;
2. Form PTO/SB/08A (1 sheet);
3. Form PTO/ SB/08B (5 sheets); and
4. Cited References (29 enclosures).

The Commissioner is hereby authorized to charge any fee deficiency, or credit any overpayment, to Deposit Account No. 18-1579. The Commissioner is also authorized to charge Deposit Account 18-1579 for any future fees connected in any way to this application.

Respectfully submitted,
ROBERTS ABOKHAIR & MARDULA, LLC

Janeen Vilven
Registration No. 47,156
Roberts Abokhair & Mardula, LLC
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Reston, Virginia 20191
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**INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 CFR 1.97**

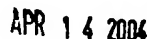
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Dear Sir:

In accordance with 37 CFR §1.56, Applicant hereby submits the following Information Disclosure Statement. The form PTO/SB/08 submitted, lists references which Applicants thinks may be relevant. These documents are not necessarily analogous art. It is respectfully requested that these documents be considered by the Examiner, and that the Examiner indicate consideration of the cited references by returning copies of the attached form PTO/SB/08 with initials or other appropriate marks affixed. Copies of all references are enclosed.

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Sheet	1	of	1
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Complete if Known

Application Number	10/631,373
Filing Date	07/31/2003
First Named Inventor	Peter SOLI
Art Unit	3737
Examiner Name	
Attorney Docket Number	2809-006

U. S. PATENT DOCUMENTS

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		Art Unit	3737		
		Examiner Name			
Sheet	1	of	5	Attorney Docket Number	2809-006

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1	J. TIELSCH, J. KATZ AND H. QUIGLEY, "Intraobserver and Interobserver Agreement in Measurement of Optic Disc Characteristics,"	
		Ophthalmology, 1988, pp. 350, vol. 95.	
	2	PAUL LICHTER, MD, "Variability of Expert Observers in Evaluating the Optic Disc," Trans. Am. Ophthalmol. Soc., 1976, pp. 532, vol. 74.	
	3	L. ZANGWILL, et al, "Agreement Between Clinicians and a Confocal Scanning Laser Ophthalmoscope in Estimating Cup/ Disk Ratio,	
		Am. J. Ophthalmol., 1995, pp. 415-421, vol. 74.	
	4	F. MIDELBERG, et al., "Ability of the Heidelberg Retina Tomograph to Detect Early Glaucomatous Visual Field Loss," J. Glaucoma, 1995, pp. 242-247, vol. 4.	
	5	D. HUANG, et al., "Optical Coherence Tomography," (Science), 1991, pp. 1178, vol. 254.	
	6	M. HEE, et al., "Optical Coherence Tomography of the Human Retina," (Arch. Ophthalmol.), 1995, pp. 325-332, vol. 113.	
	7	L. DANDONA, H. QUIGLEY and H. JAMPEL, "Variability of Depth Measurements of the Optic Nerve Head and Peripillary Retina With Computerized Image	
		Analysis," Arch. Ophthalmol., 1989, pp. 1786-1792, vol. 107.	

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		First Named Inventor	Peter SOLIZ
		Art Unit	3737
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	8	R. VARMA and G. SPAETH, " The PAR is 2000: A New System for Retinal Digital Image Analysis," Ophthalmic Surgery, 1988, pp. 183-192,	
		vol. 19.	
	9	S. WHITESIDE, et al., " Fundus Image Processing for Early Detection of Glaucoma," SPIE Poc., 1986, pp. 123-128, vol. 697.	
	10	S. WHITESIDE, S. MITRA and T.F. KRILE, "Differential Retinal Structural Damage Exhibited by Image Enhancement of Fundus Photographs, Low Vision:	
		Principles and Applications," Ed. G.C. Woo, Springer-Verlag, 1986, pp. 125.	
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	12	V. CHANDRAN, D.J. LEE and S. MITRA, " Fundus Image Registration for a PC-Based Image Processing System," Topical Meeting on Non-Invasive	
		Assessment of the Visual System, January, 1987, Lake Tahoe, NV.	
	13	S. MITRA, B.S. NUTTER and T.F. KRIEL, " Automated Method for Fundus Image Registration and Analysis," Applied Optics, 1988, pp. 1107-1112, vol. 27.	
	14	D.J. LEE, T.F. KRILE and S. MITRA, "Power Cepstrum and Spectrum Techniques Applied to Image Registration," Applied Optics, 1988, pp. 1099-1106 vol. 27.	

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		First Named Inventor	Peter SOLIZ
		Art Unit	3737
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Sheet 3	of 5	Attorney Docket Number	2809-006

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	15	M. RAMIREZ, et al., "3-Digital Surface Recovery of the Optic Nerve Head From Stereo Fundus Images, "Proc. Fifth Annual IEEE Symposium on	
		Computer-Based Medical Systems, Durham North Carolina, June 14-17, 1992, pp. 284-291.	
	16	M. RAMIREZ, S. MITRA and J. MORALES, "Visualization of the Three-Dimensional Topography of the Optic Nerve Head Through a	
		Passive Stereo Vision Model," Journal of Electronic Imaging, 1999, pp. 92-97, vol. 8, no. 1.	
	17	L.G. BROWN, "A Survey of Image Registration Techniques," ACM Computing Surveys, Dec., 1992, pp. 325-376. vol. 24, no. 4.	
	18	E. CORONA, et al., "Digital Stereo Optic Disc Image Analyzer for Monitoring Progression of Glaucoma," SPIE Proc. on Image Processing,	
		February 23-25, 2002.	
	19	JOSEPH CAPRIOLI, MD, "Recognizing Structural Damage to the Optic Nerve Head and Nerve Fiber Layer in Glaucoma," American Journal of	
		Ophthalmology, October, 1997, pp. 516-520, vol. 124., no. 4.	
	20	W. SPONSEL, et al., "A Clinically Practical Reproducible and Rapid Means for Obtaining and Comparing Glaucomatous Stereo Disc Images, " IOVS,	

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		1998, pp. 117, vol. 39.	
	21	G. SHUTTLEWORTH, C. KHONG and J. DIAMOND, " A New Digital Optic Stereo Camera: Intra-Observer and Inter-Observer Repeatability of Optic Disc Measurements," Br. J. Ophthalmol., 2000, pp. 403-407, vol. 84.	
	22	M. GREANEY, D. GARWAY-HEATH and D. HOFFMAN, " Comparison of Imaging Methods to Distinguish Normal Eyes from Those With Early Glaucoma," European Glaucoma Society Meeting and Association for Research in Vision and Ophthalmology Annual Meeting, London England and Fort Lauderdale, FL. 2000.	
	23	L. PECORA, et al., " Intra and Inter-Observer Variability of Optic Nerve Head by Using the Discam Acquisition System," IOVSs, 2001, pp. 2985, vol. 41.	
	24	M. LIM, et al., "Digital Stereoscopic Photography With Chevron Drawings Versus Standard Film Photography: Estimate of Cup to Disc Measurements," IOVSs, 2001, pp. 697, vol. 41.	
	25	J. Nicholl, et al., "Comparison of Heidelberg Retina Tomograph and Marcher Discam Analysis Results," IOVSs, 2001, pp. 101, vol. 41.	

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	26	J. MENSAH, et al., " The Chevron Ratio: A New Method of Analyzing the Optic Disc From Stereo Color Photographs Using Vascular Landmarks," 1997	
		pp. 3870, vol. 38.	
	27	P. SOLIZ, et al., " Considerations of Stereo Cues, Resolution and Contrast in a Computer-based Grading System for Age-Related Macular	
		Degeneration," Associatin for Research in Vision and Ophthalmology (ARVO), Ft., Lauderdale, FL., May 2000.	
	28	M. WILSON, et al., "Optimizing Retinal Image Digitization for Improved Digital Processing and Visualization," 14th IEEE Symposium on Computer-Based	
		Medical Systems (CBMS), July, 2001, Rockville Pike, Bethesda, Maryland, pp 26-27.	
	29	PHILIP W. SMITH and N. NANDHAKUMAR, "An Improved Power Cepstrum Based Stereo Correspondence Method for Textured Scenes, "	
		IEEE Trans. on Pattern Analysis and Machine Intelligence, March, 1996, pp. 338-348, vol. 18, no. 3.	

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